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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,462	01/06/2004	Motoharu Takeda	247121US0	2345

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EXAMINER

SAYALA, CHHAYA D

ART UNIT PAPER NUMBER

1761

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/751,462	Applicant(s) TAKEDA ET AL.	
	Examiner C. SAYALA	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/29/04</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Virrki et al. (US Patent 5858424).

See col. 2, lines 60-66 which discloses a fermentation by-product that has a pH of 3 to 3.8 (col. 3, line 44) and is added to silage (col. 5, lines 65-67). Amount of fermentation by-product is given at Table 10 for example and overlaps with the amount claimed.

2. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by the Minoru et al. abstract. (as cited on the PTO-form1449).

The abstract teaches a fermentation broth from glutamic acid fermentation which has a pH of 3.2.

3. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Binder et al. (US Patents 5431933 and 5622710).

The patent discloses a feed additive from an amino acid fermentation broth such as lysine and which has a pH < 7. See the claims and the examples.

4. Claims 1-3, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 955642.

See the claims, page 1, lines 40-45, lines 75-80, page 2, lines 15-20, 90-95.

5. Claims 1-3, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Gillis (US Patent 2758027).

See col. 1, lines 35-45, col. 2, lines 39-40, 45-50, col. 3, line 23, lines 5-10.

6. Claims 1-3, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bioline International Newsletters, downloaded from <http://www.bioline.org.br/request?nl95015>, The Agbiotech Bulletin, Vol. 2, Issue 6, October 1994, page 8 of 17 taken in light of "Proteferm" brochure downloaded from [www.proteferm.com](http://www.proteferm.com).

The newsletter Indicates the use of Proteferm in rumen feeds which typically is predominantly silage. The brochure shows that the pH of the product is inherently fermentation broth condensates from glutamic acid fermentation with a pH of 4.3.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Virrki et al. in view of Schanze (US Patent 4357358) or GB 955642.

Virki discloses using a fermentation by-product that has a pH of 3 to 3.8 (col. 3, line 44) that is added to silage (col. 5, lines 65-67). Amount of fermentation by-product is given at Table 10 for example and overlaps with the amount claimed. The patent also discloses adding lactic acid bacteria (see col. 5, lines 40-43 and claim 4. The patent does not disclose adding saccharides to the feed, but Schanze discloses the ingredients that go into a basic feed ration for an animal. See col. 6 and col. 7 that disclose fermentation solubles, whey, which would contain lactic acid bacteria, vinasse, cellulose, starch, etc. Note the claims. Such disclosure suggests the use of materials that include or contain saccharidic materials and it would have been obvious to include such at least to support the bacteria therein. Alternatively, the basal ration in '642 shows that adding sugar was typical, since it was known that sugars provide carbohydrate for energy to the basal ration of an animal. It would have been prima facie obvious to add such to the animal ration of the primary reference.

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bioline International Newsletters, downloaded from <http://www.bioline.org.br/request?nl95015> , The Agbiotech Bulletin, Vol. 2, Issue 6, October 1994, page 8 of 17 in view of "Proteferm" brochure downloaded from [www.proteferm.com](http://www.proteferm.com), Julien (US Patent 5709894) and Ware et al. (US Patent 5534271).

The newsletter indicates the use of Proteferm in rumen feeds which typically is predominantly silage. The brochure shows that the pH of the product is inherently fermentation broth condensates from glutamic acid fermentation with a pH of 4.3. It does not teach the addition of silage, lactic acid bacteria or sugars

Julien teaches that the normal diet of animals is forage (col. 1, line 42) and that the bacterial action reduces starch and sugars. The patent cites "Proteferm" in the front page and teaches similar fermentation broth solubles. See the claims.

Ware et al. teach that the addition of Lactic acid bacteria and sugars improve feed efficiency when used with silage. See col. 4 and example 1. It would have been obvious to one of ordinary skill in the art to add proteferm and the additives recommended by Ware et al. for its benefits.

### ***Conclusion***

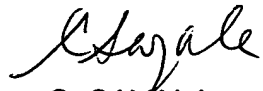
Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. SAYALA whose telephone number is 571-272-1405.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "C. Sayala", with a stylized, cursive script.

C. SAYALA  
Primary Examiner  
Group 1700.